

## ABSTRACT

A method of initializing an ITU Recommendation G.729 Annex B voice activity detection (VAD) device is disclosed, having the steps of (1) extracting a set of parameters from a signal that characterize the signal; (2) calculating an energy measure of the signal from the set of parameters; (3) comparing the energy measure with a reference value; (4) determining an initial value for an average of a noise characteristic of the signal; and (5) counting the number of times the energy measure equals or exceeds the reference level.

Also disclosed is a method of converging an ITU Recommendation G.729 Annex B voice activity detection (VAD) device, having the steps of: (1) determining a noise identification threshold value; (2) comparing a number of energy measures of a signal to the noise threshold value; (3) determining a first value representing an average of the number of energy measures, when the energy measure is less than the noise threshold, wherein only the energy measures of the number of energy measures having values less than the noise threshold value are used to determine the first value; (4) determining a second value representing an average of the number of energy measures; and (5) substituting the first value for the second value when a specific event occurs, indicating the divergence of the two values.